

Appl. No. 09/438,431
Amdt. Dated May 6, 2005
Reply to Office action of February 9, 2005
Attorney Docket No. P12817-US1
EUS/J/P/05-3109

REMARKS/ARGUMENTS

Claim Amendments

The Applicant has amended claims 2-3, 5-6, 11-12, 15, 17, and 19 to correct informalities, correct antecedent basis and to clarify terms. Applicant respectfully submits no new matter has been added. Accordingly, claims 2-3, 5-6, 9-10 and 11-20 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

Claim Rejections – 35 U.S.C. § 103 (a)

Claims 2-3, 5-6, 9-10 and 11-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gossett Dalton, Jr. et al. (US 6,426,955 hereinafter Dalton) in view of Belanger, et al. (US 5,875,186 hereinafter Belanger). The Applicant respectfully traverses the rejection of these claims.

The Dalton reference appears to disclose a centralized routing engine for routing VoIP calls within the Internet. In Dalton, an end device using VoIP is coupled to an interface that is communicating with a source gateway within the Internet. The source gateway has a list of gateways that are eligible to terminate a voice telephone call. Three networks are mentioned (col 4, line 43-53): a calling party's telephone network (1) that connects the calling party to a source gateway; the Internet (2), which connects the source gateway with the destination gateway; and the called party's telephone network (3) that connects the destination gateway to the called party (also mentioned as terminating device).

The Applicant respectfully directs the Examiner's attention to Claim 5 of the present invention.

5. (Currently Amended) A method of selectively accessing an Internet Protocol (IP) network utilizing an end device that is coupled to an indirect interface capable of communicating with one or more access network terminating devices, each said access network terminating device being coupled to an associated access network that is further coupled to the IP network, the method comprising the steps of:

determining whether the end device has access to said IP network;

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confirming the availability of said one or more access network terminating devices;

determining the access capability of each of said one or more access network terminating devices and ranking said access capability according to one or more predetermined factors;

comparing the determined access capability for each of said one or more access network terminating devices to said access network with a preferred access capability being associated with said end device;

selecting at least one of said one or more access network terminating devices having the highest ranking access capability to provide an optimum connection between said end device and said access network;

subsequent to connecting to said at least one of said one or more access network terminating devices, polling said indirect interface to detect if one or more new access network terminating devices are available to said end device;

determining an access capability for each of the detected one or more new access network terminating devices; and

comparing said access capability for each of the detected one or more new access network terminating devices with said preferred access capability of said end device to determine whether said detected one or more new access network terminating devices can improve the current connection of said end device to said network. (emphasis added)

The Applicant's invention discloses a method and system for providing access to an IP network utilizing a chosen terminating device connected to an access network, which is further connected to the IP network. An end device such as a computer, may attempt to access the IP network (i.e., the Internet) through one or more access network terminating devices that are already connected to the IP network via the access network such as LAN access, Satellite access, wireline network access, etc. (Figure 1). Known examples of network terminating devices include a cable or twisted pair associated with a fixed access network or a cellular phone for a wireless network (see Background) and may also include a Bluetooth wireless connection. A computer accessing the Internet through a cell phone would be an example of an end device (computer) connecting to an IP network (Internet) through an access network terminating device (cell phone, the access network is the cellular network).

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In the Applicants' invention, the end device, utilizing an indirect interface, determines the access capability and current load condition of each of the access network terminating devices that may be available to the end device. The end device then selects the appropriate access network terminating device based on the information obtained and the end device's predetermined preferences. (Summary). End device preferences are typically stored on the end device as a preferred access capability and the preferences include various predetermined factors. Information regarding network access capability is retained within memory in each access network terminating device as access capability information. Upon attempting a connection with a network, the end device queries the available access network terminating devices via the indirect interface and compares the end device's preferred access capability to the access network terminating device's current capability information. Based on the comparison, a 'best' access network terminating device is selected for connecting the end device to the access network through the indirect interface. During the call the indirect interface continues querying the available access network terminating devices to determine whether there is a more advantageous access network terminating device available.

The Belanger reference appears to disclose a system that allows a mobile unit to determine which access point provides a best communications connection. The system utilizes multiple mobile contacts and access points to learn the communication characteristics of the network and mobile units. Access points in the network communicate with each other and gather information about the mobile unit. As the mobile unit travels through a network or area, information regarding the access points that are in range of the mobile is transmitted to the mobile and the mobile unit can establish quality communication links with an appropriate access point. The mobile unit utilizes connection information provided by other mobile units and other access points to improve connections while roaming in the area.

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The Applicant respectfully asserts that neither Dalton nor Belanger discloses (directly or inherently) at least the following features present in Claim 5 (similar features can be found in independent claims 11 and 15): 1) neither Dalton nor Belanger disclose an indirect interface; 2) neither disclose multiple factors to choose from to determine a preferred access device; 3) neither references poll an intermediate device (indirect interface) to determine the preferable access device; and 4) neither reference discloses the Indirect interface continuing to check the available access devices to improve access.

A telephone in the Dalton reference is utilized to access the Internet through a source gateway. The telephone, in turn, uses the source gateway to gain access to the Internet (though not discussed, the source gateway is probably an operator's gateway connection to the Internet). This is a direct connection to the IP network. The telephone does not determine whether or not the public telephone network is capable of communicating with one or more access network devices; the telephone connects directly or indirectly through the public network, to the source gateway. In comparison, the Applicants' invention discloses an end device utilizing an indirect device to choose between available access network terminating devices to connect to an access network that is further connected to the Internet (terminating devices that include cable, twisted pair and WiFi). The Applicant's invention checks each available device to determine the optimum connection before and during the connection to the Internet (Summary). The indirect interface coupled with the end device, such as Bluetooth, may be used to determine the preferred access network terminating device while the direct interface of the end device is connected to the principal network (such as a cell phone connected to a cellular network)

There is no suggestion by Dalton or Belanger that the calling party may confirm access capability and choose between network terminating devices according to the access capability, which includes predetermined factors. The cited portions of the Dalton reference regarding this limitation (Col. 5, lines 3-43, Col. 12, lines 11-20), do not appear to choose between devices, but instead

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describes a service point, within the Internet, for providing an authorization response message to provide access to a destination gateway. Also described is the system determining router hop count from the originating device (Applicant's end device) and multiple potential terminating devices (called parties in Dalton).

Applicants' Claim 5 combination also recites selecting at least one of said one or more access network terminating devices having the highest ranking access capability to provide an optimum connection between said end device and said access network. This step is neither taught nor suggested by Dalton or Belanger. In the Official Action discussion regarding this step, a correspondence is drawn between this claimed feature and the description of the operation of the service point in routing calls in the Dalton reference (Col. 11, lines 39-60 and Col. 5, lines 3-43). Applicants have reviewed these cited portions of Dalton and are unable to find any reference to selecting a network terminating device according to the device's connection characteristics, i.e., according to access capability ranking. Instead, the cited portion of Dalton describes a routing mechanism within the Internet and authorization and destination gateway selection utilizing the service point. The service point counts hops to determine the best route across the Internet.

The Applicant respectfully submits that Dalton and Belanger individually or together do not teach or even suggest the above-emphasized features from Claim 5. The Applicant respectfully requests the withdrawal of the rejection of claim 5 and the respective dependent claims.

As between Claim 5 and the Dalton and Belanger references, the Applicant respectfully submits that independent Claims 11 and 15 contain limitations analogous to those found in Claim 5. For the above given reasons the Applicant respectfully requests the withdrawal of the rejection of Claims 11 and 15 and the respective dependent claims.

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Prior Art Not Relied Upon

In paragraph 9 on page 15 of the Office Action, the Examiner stated that the prior art made of record and not relied upon is considered pertinent to the Applicant's disclosure.

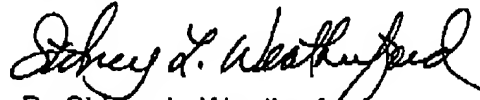
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CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for all pending claims.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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Date: May 6, 2005

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